

**In the Claims**

Below is a list of current claims with status identifiers.

1. [Originally Filed] A non-compliant medical balloon, where the non-compliant medical balloon may be changed from a deflated state to an inflated state by increasing pressure within the balloon, comprising:

a first fiber layer;

5 a second fiber layer over said first fiber layer such that the fibers of the first fiber layer and the fibers of the second fiber layer form an angle;

a binding layer coating the first fiber layer and said second fiber layer;

wherein an interior surface area of the non-compliant medical balloon remains substantially unchanged when the balloon changes from a deflated state to an inflated state.

2. [Originally Filed] The non-compliant medical balloon of claim 1, wherein said first fiber layer comprises inelastic fibers.

3. [Originally Filed] The non-compliant medical balloon of claim 1, wherein said first fiber layer comprises a plurality of parallel first fibers.

4. [Originally Filed] The non-compliant medical balloon of claim 1, further comprising an adhesive layer adhering to said first fiber layer.

5. [Originally Filed] The non-compliant medical balloon of claim 1, wherein said second fiber layer comprises a plurality of parallel second fibers.

6. [Originally Filed] The non-compliant medical balloon of claim 1, wherein said angle is substantially a right angle.

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7. [Originally Filed] The non-compliant medical balloon of claim 1, wherein said angle does not change when the balloon changes from a deflated state to an inflated state.

8. [Originally Filed] The non-compliant medical balloon of claim 3, wherein said plurality of parallel first fibers are substantially parallel to the longitudinal axis of the balloon.

9. [Originally Filed] The non-compliant medical balloon of claim 5, wherein said plurality of parallel second fibers are substantially transverse to the longitudinal axis of the balloon.

10. [Originally Filed] The non-compliant medical balloon of claim 1, wherein said binding layer is a polymeric coating.

11. [Originally Filed] The non-compliant medical balloon of claim 10, wherein said polymeric coating is formed of a polymer.

12. [Originally Filed] The non-compliant medical balloon of claim 10, wherein said polymeric coating is formed of a copolymer.

13. [Originally Filed] The non-compliant medical balloon of claim 3, wherein said parallel first fibers each have a thickness of about 0.0005 inch.

14. [Originally Filed] The non-compliant medical balloon of claim 5, wherein said parallel second fibers each have a thickness of about 0.0005 inch.

15. [Originally Filed] The non-compliant medical balloon of claim 5, wherein said parallel second fibers have a wind density of approximately 50 wraps per inch.

16. [Originally Filed] The non-compliant medical balloon of claim 1, wherein said angle is about ten degrees.

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17. [Originally Filed] The non-compliant medical balloon of claim 1, further comprising a third fiber layer on said second fiber layer.

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